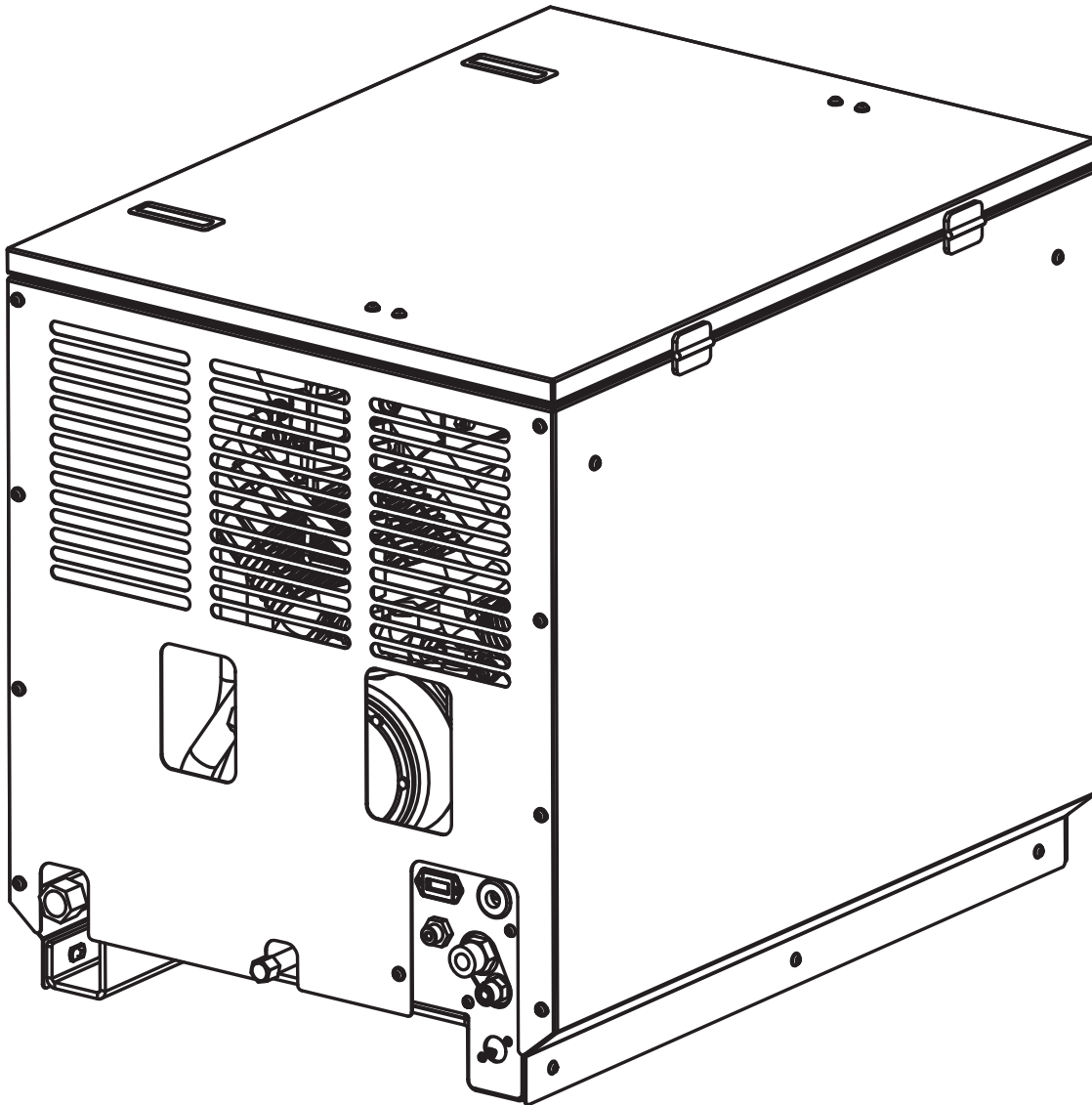




MODEL SHD-66DD

OWNER'S MANUAL

Safety • Operation • Installation • Maintenance



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AE Compressor Manual Revisions

Date of Revision	Section Revised	Description of Revision
August 2013	All Sections	Updated to new style compressor
May 2014	Assembly Drawings	Updated to new shroud design

Introduction

American Eagle Compressors are designed to provide safe and dependable service for a variety of operations. With proper use and maintenance, American Eagle Compressors will operate at peak performance for many years.

This manual contains information vital to the safe use and efficient operation of this unit. Following the information provided within this manual can ensure the longevity of the compressor. Carefully read and study the operator's manual before using the unit. Failure to adhere to the instructions could result in property damage or even serious bodily injury to the operator or others close to the compressor.

A copy of this manual is provided with every compressor and shall remain with the compressor at all times. Information contained within this manual does not cover all maintenance, operating, or repair instructions pertinent to all possible situations. This manual is not binding. American Eagle reserves the right to change, at any time, any or all of the items, components, and parts deemed

necessary for product improvement or commercial/production purposes. This right is kept with no requirement or obligation for immediate mandatory updating of this manual.

This product manual is not intended as a training manual for beginners or unskilled operators. This manual offers guidelines for correct and safe usage of the compressor, maintenance, and troubleshooting. If more information is required or technical assistance is needed, please contact AE Technical Support.

Some sections of this manual contain information pertaining to all American Eagle manufactured compressors and may or may not apply to your specific model.

If this manual becomes damaged, misplaced, or unreadable at any point, or if you feel that any part of this manual is unclear or incorrect, please contact AE Technical Support at 800-321-3741 or email at service@americaneagleacc.com

**For Technical Questions, Information, Parts, or Warranty, Call Toll-Free at
800-321-3741**

Hours: Monday - Friday, 8:00 a.m. - 5:00 p.m. CST

Or email at the following addresses:

Technical Questions, and Information

service@americaneagleacc.com

Order Parts

parts@americaneagleacc.com

Warranty Information

warranty@americaneagleacc.com

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Chapter 1: Safety

This manual contains vital information for the safe use and efficient operation of this unit. Carefully read the operators manual before starting the unit. Failure to adhere to the instructions could result in serious bodily injury or property damage.

The SHD-66DD Hydraulic Air Compressor will provide safe and dependable service if operated according to instructions. Read and understand the safety precautions given in this manual and on the decals attached to the shields. Failure to do so can result in personal injury or equipment damage.

Operators and maintenance personnel must always comply with the safety precautions. These precautions are given here for your safety. Review them carefully before operating the compressor and before performing maintenance or repairs.

Supervising personnel should develop additional precautions relating to the specific work area and local safety regulations.

Precautions

Always wear safety equipment such as goggles, ear plugs and head protection at all times when operating the compressor.

Do not inspect or clean the compressor while the hydraulic power source is connected. Accidental engagement of the tool can cause serious injury.

Before performing any maintenance on the compressor, place a warning tag on the hydraulic power source or disconnect the hoses from the compressor motor to prevent accidental startup of the compressor.

Always connect hoses to the compressor before energizing the hydraulic power source. Be sure

all hose connections are tight, both air and hydraulic.

Establish a training program for all operators to ensure safe operation.

Do not operate the compressor unless thoroughly trained or under the supervision of an instructor.

Do not operate the compressor if it is damaged, improperly adjusted or not completely or properly assembled.

Never operate the compressor with any of the guards removed.

Do not attempt to adjust or disable the compressors air pressure relief valve. This valve limits the air pressure to 175 PSI.

The surface of the air compressor and the plumbing between the compressor and the cooler may reach temperatures above 150 degrees. Touching these surfaces during operation can cause burns.

The air taken in by the air compressor must be free of flammable fumes and vapors.

Compressor speed should not exceed 1000 RPM.

Use and operate this air compressor only in full compliance with all pertinent O.S.H.A. requirements and all Federal, State and Local codes or requirements.

Chapter 2: Specifications

Drive System Description	
<ul style="list-style-type: none"> • 18 GPM Hydraulic System • 2700 PSI Pressure Relief Setting • All Steel Plumbing W/ JIC Fittings • 861 CFM, 12 Volt Cooler Fan • Direct Drive Coupling 	<ul style="list-style-type: none"> • 2200 PSI System Pressure • 12 VDC Solenoid Control Valve • 165 Sq. In., 300 BTU Cooler • 6061 Aluminum Manifold • Air Pressure Control Valve

Compressor System Description	
<ul style="list-style-type: none"> • Cast Iron Crankcase Casting • Gasket-free Integrated Cylinder/Head • Precision Balanced Flywheel • Large Diameter Finned Inner Cooling Tubing • Positive Acting Centrifugal Head Unloaders 	<ul style="list-style-type: none"> • Tapered Roller Main Bearings • Heavy Ductile Iron Crankshaft • Pressure Relief Valves in interstage and discharge • Splash Lubricated System • Preset Pilot Control Valve

General Information	
• Model:	Champion R30D
• Weight:	425 lbs. (dry)
• Cylinders:	Four Cylinder(Two Stage)
• Delivery:	46 CFM @ 175 PSI
• Maximum Working Pressure:	175 PSI
• Maximum Compressor Speed:	1000 RPM
• Dimensions: (w/o reservoir)	33.5”L x 23.5”W x 25.5”H
• (w/ reservoir)	48.5”L x 23.5”W x 25.5”H
• Electrical:	12 VDC
• Crankcase Oil Capacity:	4 Quart
• Oil Reservoir Capacity:	16 Gallons

Chapter 3: Operation

Each compressor is bench tested under load at the factory to ensure proper break-in and operation. While it is not necessary to follow any break-in procedure, the following checks should be made before putting the unit into service and periodically during use.

Before Start-Up

Inspect unit for any visible signs of damage.

Check the oil level in the compressor with the dipstick on the unit. If oil is needed, use American Eagle synthetic compressor oil (P/N C0087) or an equivalent synthetic oil. **Note: There may be oil left in the crankcase from the factory bench test. Overfilling may cause the compressor to back blow oil. Always check the oil level and fill to the designated marking on the dipstick before putting the unit into service.**

Check hoses (air and hydraulic) for weak or worn condition and make sure that all connections are secure.

Check the air intake filters on each head to make certain that they are clean and unobstructed. Dirty air filters are a possible cause of reduced air output.

General Information

To use the compressor, start the vehicle engine and engage the hydraulic system. The compressor can now be activated using the compressor switch. This energizes the hydraulic solenoid sending oil to the hydraulic drive motor and starts the compressor. Through the air pressure switch and pilot valve, the system will now function automatically. Once engaged, adjust the engine speed control to ensure that the compressor speed does not exceed 1000 RPM under load. Adjustment instructions are provided with the speed control unit.

Air Pilot Valve Operation (Head Unloading System)

When the hydraulic system is engaged the compressor will pump air into the receiver until the pressure reaches 175 psi. At this time the air pilot valve senses the pressure in the receiver and engages an intake valve hold-open mechanism. The compressor will run free until the pressure in the receiver falls below 145 psi and the air pressure valve disengages the intake valve hold-open mechanism to allow the compressor to pump air. See head unloading system for detailed views and adjustment instructions on the next page.

Hydraulic Motor Bypass Circuit

The hydraulic motor is equipped with a bypass circuit which protects the compressor from over speed. When the compressor is pumping, all hydraulic oil flows through the hydraulic motor. When the

compressor is running free, some oil is bypassed around the hydraulic motor preventing the compressor from speeding up until the engine speed control disengages. The bypass circuit, in conjunction with the engine speed control will cause the compressor to turn very slowly when not pumping. This is normal operation. When air is again required, the engine speed control engages, the bypass circuit closes and the compressor will operate at speed. The bypass circuit is set at the factory, no adjustment is necessary.

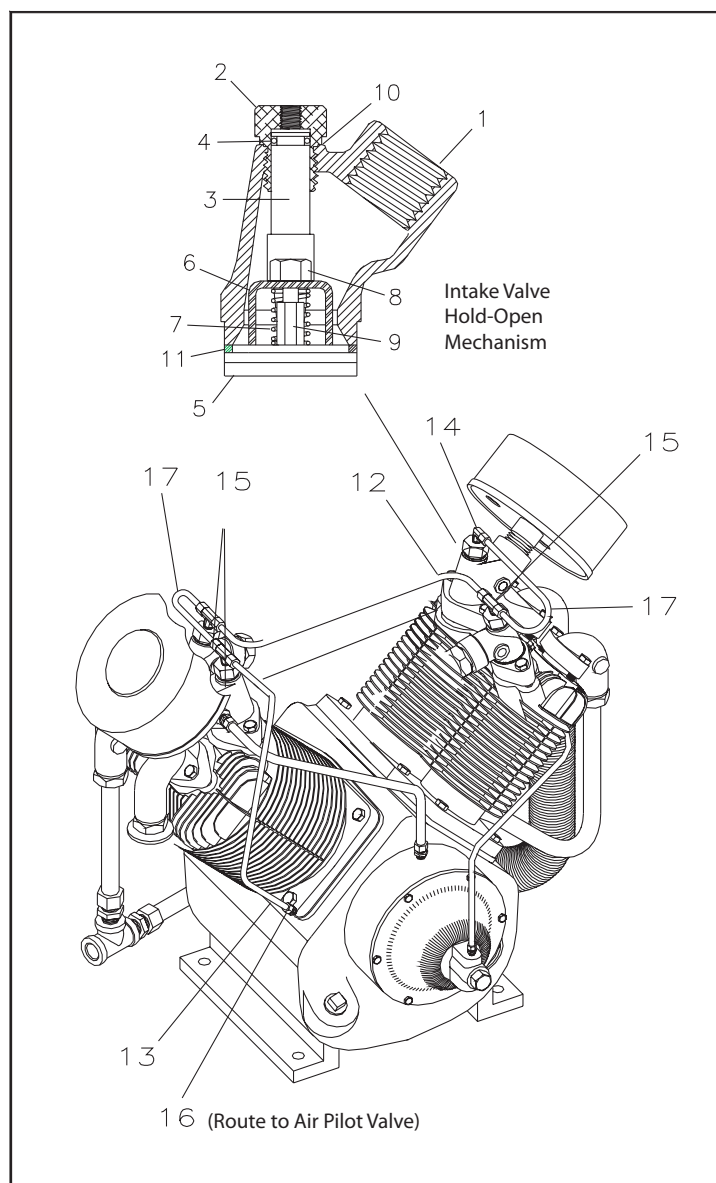
Operating Notes:

This reciprocating compressor must not be used for breathing air. To do so will cause serious injury whether air is supplied direct from the compressor source or to breathing tanks for later use. Any and all liabilities for damage or loss due to injuries, death and/or property damage, including consequential damages stemming from the use of this compressor to supply breathing air will be disclaimed by the manufacturer.

The use of this compressor as a booster pump and/or to compress a medium other than atmospheric air is strictly non-approved and can result in equipment damage and/or injury. Non-approved uses will also void the warranty.

Never use plastic pipe or improperly rated metal pipe. Improper piping materials can burst and cause injury or property damage.

Head Unloading System



LOW PRESSURE MANIFOLD ASSEMBLY

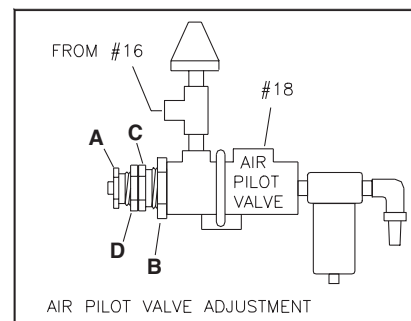
ITEM	PART No.	DESCRIPTION	QTY
01	7468	MANIFOLD, L.P. INTAKE	2
02	7481	CYLINDER	2
03	7482	PISTON	2
04	7483	O-RING	2
05	7471	VALVE ASSEMBLY	2
06	7444	CLAW	2
07	7445	SPRING	2
08	7491	NUT, HEX	2
09	7447	GUIDE STEM	2

HIGH PRESSURE MANIFOLD ASSEMBLY

ITEM	PART No.	DESCRIPTION	QTY
01	7469	MANIFOLD, H.P. INTAKE	2
02	7481	CYLINDER	2
03	7482	PISTON	2
04	7483	O-RING	2
05	7472	VALVE ASSEMBLY	2
06	7489	CLAW	2
07	7490	SPRING	2
08	7491	NUT, HEX	2
09	7492	GUIDE STEM	2
10	7493	GASKET	2
11	7494	GASKET	2

TUBING

ITEM	PART No.	DESCRIPTION	QTY
12	7495	INTERMEDIATE TUBE	1
13	7496	ACTUATING TUBE	1
14	7497	COMPRESSION FTG	1
15	7498	COMPRESSION TEE	3
16	7499	COMPRESSION FTG	1
17	7500	MANIFOLD TUBE	2
18	3853	AIR PILOT VALVE	1



Air Pilot Valve Adjustment

(See Air Pilot Valve Adjustment Detail)

High Pressure Adjustment: Proceed with the following while the compressor is running.

- 1.) Loosen locknut (D) and back off several turns. Do not turn differential adjuster (C).
- 2.) Check reading on the tank pressure gauge. Set the compressor maximum pressure at 175 psi. Over pressurizing compressor will cause damage and void warranty. Turn threaded cap (A) clockwise to increase pressure or counterclockwise to decrease pressure.
- 3.) After pressure is set, tighten locknut (D). Be careful not to move the threaded cap (A).

Differential Pressure Adjustment: Proceed with the following while the compressor is running.

- 1.) Loosen locknut (B) and back off several turns.
- 2.) Check reading on the tank pressure gauge. Set the pressure to 30 psi differential (unload at 175 psi, reload at 145 psi). Turn nut (C) clockwise to increase differential pressure or counterclockwise to decrease differential pressure.
- 3.) After pressure is set, tighten locknut (B). Be careful not to move nut (C)

Chapter 4: Maintenance

The following table is a list of routine maintenance items, including service intervals. Service intervals are listed as hours, days, or weeks, whichever occurs first. American Eagle recommends that these service intervals be followed. Before performing any maintenance function “Lock Out” or “Tag Out” all sources of power. Be sure all air pressure in unit is relieved. Failure to do so may result in injury or equipment damage.

Service Intervals				
Maintenance operation	Daily	Weekly	Monthly	Hourly
Drain air tanks	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Check crankcase oil level	<input checked="" type="checkbox"/>			
Check fittings and airlines	<input checked="" type="checkbox"/>			
Check hydraulic fluid level	<input checked="" type="checkbox"/>			
Inspect and clean air intake filters		<input checked="" type="checkbox"/>		
Clean and operate safety valves		<input checked="" type="checkbox"/>		
Clean cooling fins on radiator		<input checked="" type="checkbox"/>		
Inspect check valve		<input checked="" type="checkbox"/>		
Inspect and clean compressor valves			6	
Replace hydraulic filter			6	
Replace air filters			3	
Tighten all fittings and fasteners			3	
Check all electrical connections			3	
Inspect and clean air check valve				250
CHANGE CRANKCASE OIL (see footnote below)				

Under normal operating conditions, oil changes are required every 3 months. When operating in a dirty environment, change the oil more frequently as your particular operating condition dictates.

**USE AE SYNTHETIC COMPRESSOR OIL P/N C0087.
COMPRESSOR CRANKCASE CAPACITY IS 4 QUARTS.**

General preventative maintenance includes maintaining proper fluid level in both systems and the general cleanliness of the equipment. Proper fluids according to the specifications are required.

Chapter 5: Installation

COMPONENT INSTALLATION

This section pertains to the installation of the air compressor, PTO, pump and other related items. The instructions are intended as a guide to assist you with particular installation. These instructions will provide only general information.

Pump Assembly:

The pump assembly may either be installed directly on the PTO or as an optional method, may be driven by a driveline from the PTO. Pump manufacturers provide specific installation information for their products and should be consulted if questions arise.

PTO Assembly:

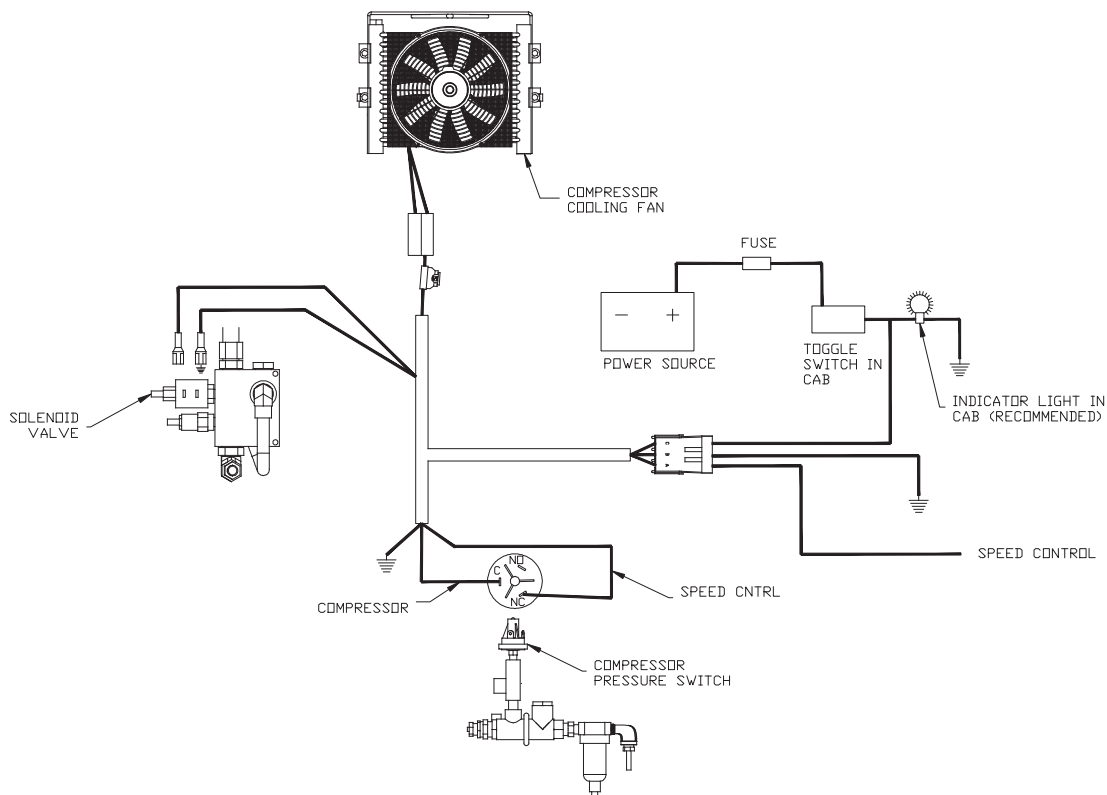
Check with the PTO manufactures representative for specific instructions regarding your particular make, model, and year of vehicle. As some trucks may require modification of the transmission cross member and the exhaust system, the manufacturer's instructions should be followed to insure proper installation of the PTO.

Compressor Assembly:

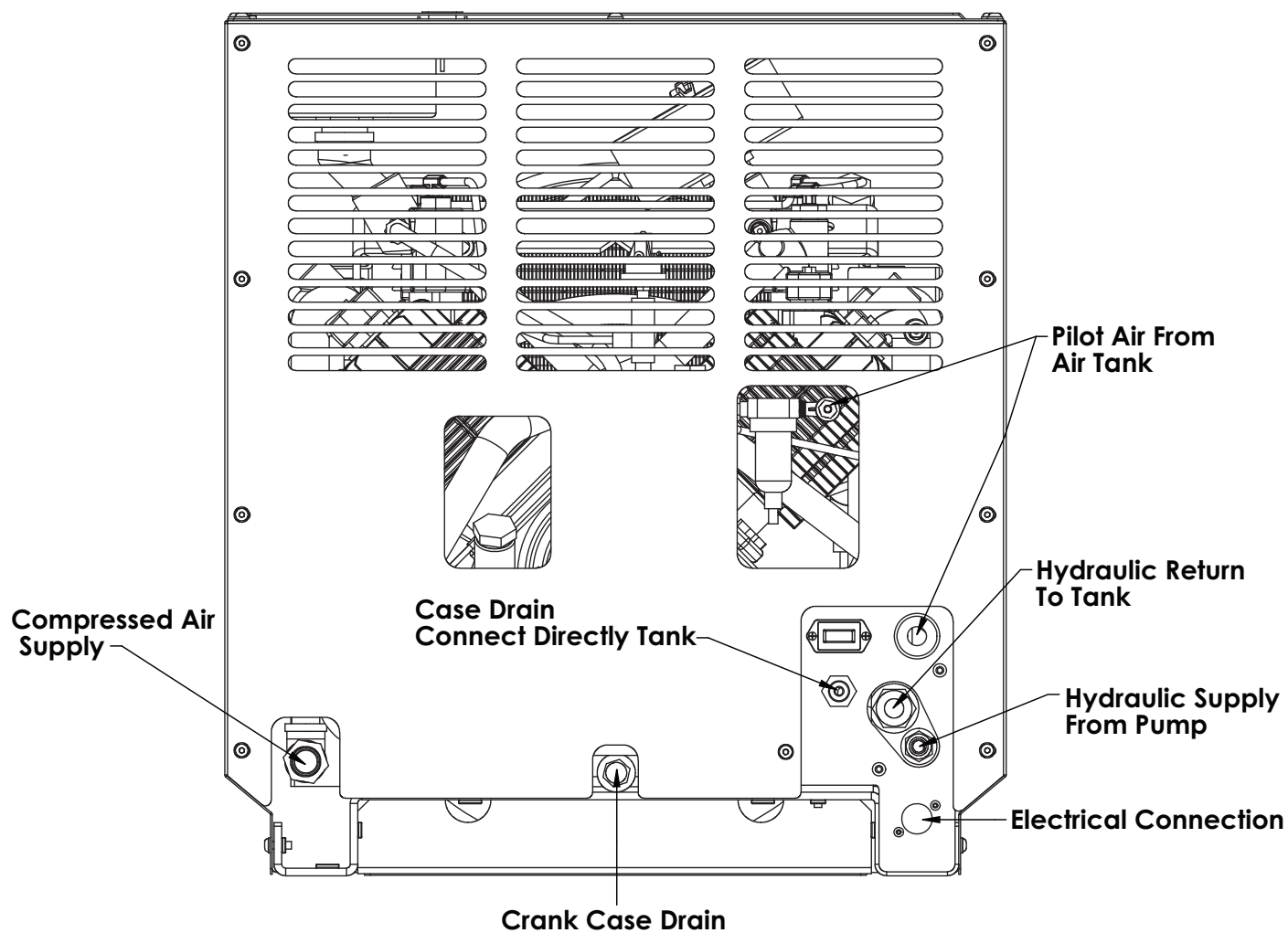
Prepare the mounting location of the compressor by locating and drilling four (4) holes, 9/16" diameter as per the mounting pattern of the air compressor base. Using four (4) 1/2" x 1.50" GR-5 cap screws, 1/2" flat washer, and 1/2" nyloc nut, secure the compressor in place. The compressor is air cooled, and must have a clean supply of cooling air to the fan with minimum restrictions. Adequate space must be provided for proper circulation of air.

Electric speed control:

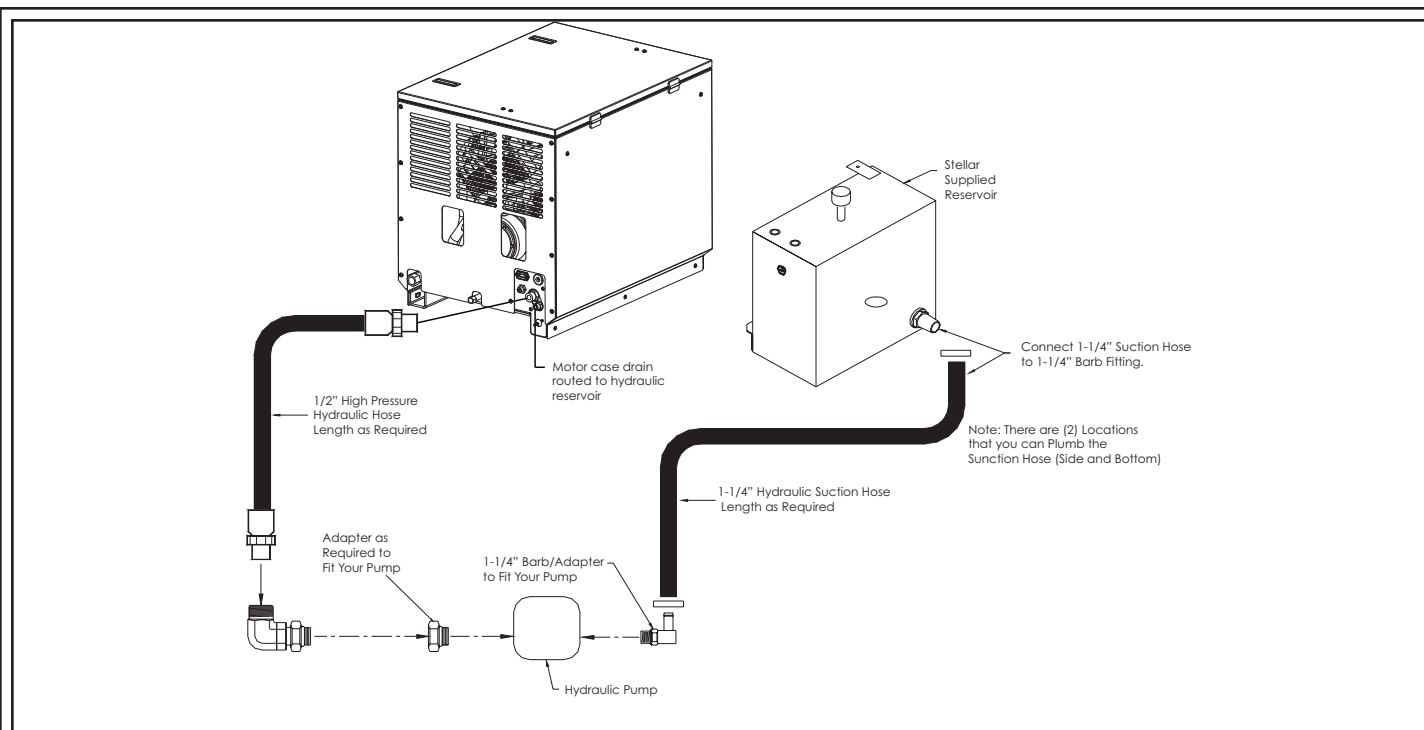
An optional electric or electronic speed control must be used to maintain proper operating speed of the air compressor. The engine speed control will automatically increase from idle to a preset speed when engaged and decrease when disengaged.



Component Installation Continued...

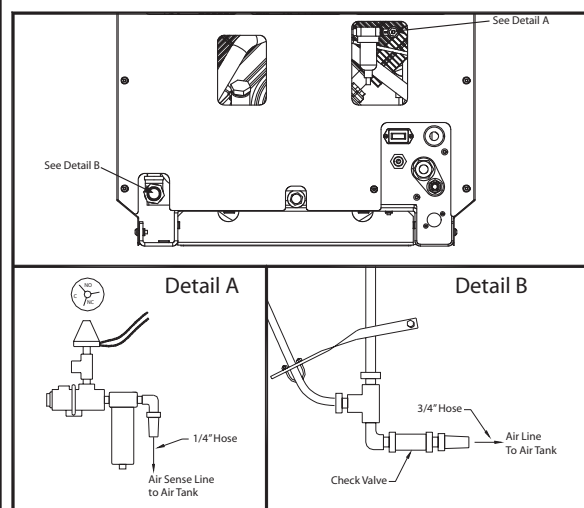


Component Installation Continued...



Hydraulic System:

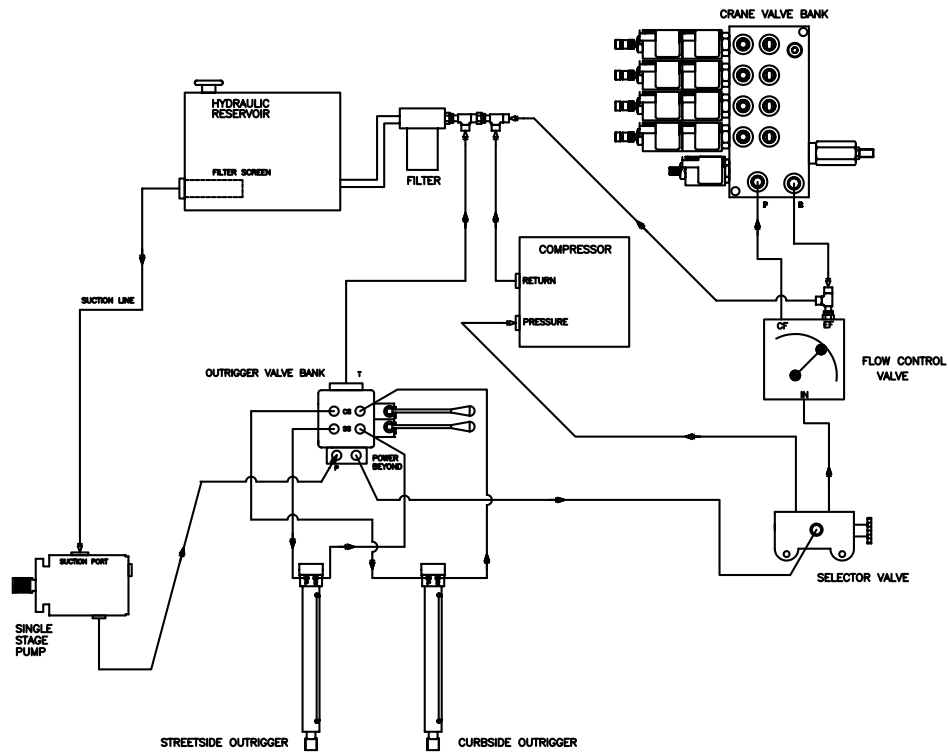
Installed on the compressor are bulkhead fittings to which hydraulic lines are attached. To the appropriate fitting (see drawing detailing front of compressor), a 1/2" high-pressure hose must be attached. This hose comes from the hydraulic pumps pressure side. A 1-1/4" hydraulic suction hose must be installed from the hydraulic reservoir to the hydraulic pump. (See drawing above) Note: For compressors purchased without a reservoir a 3/4" minimum low-pressure return line is connected to the hydraulic return fitting and is routed to the oil reservoir through a filter. The case drain line from the hydraulic motor is also routed to the oil reservoir (DO NOT INSTALL A FILTER ON THE CASE DRAIN LINE). American Eagle recommends a sufficient sized reservoir be provided which includes the proper suction and return filters. The cooler on the compressor is designed and sized to cool the air compressor efficiently. An auxillary oil cooler is required when additional hydraulically operated equipment are added to the hydraulic system. Pressure on the return line exceeding 200 PSI can and will cause damage to the filter, cooler, and components of the compressor hydraulic system.



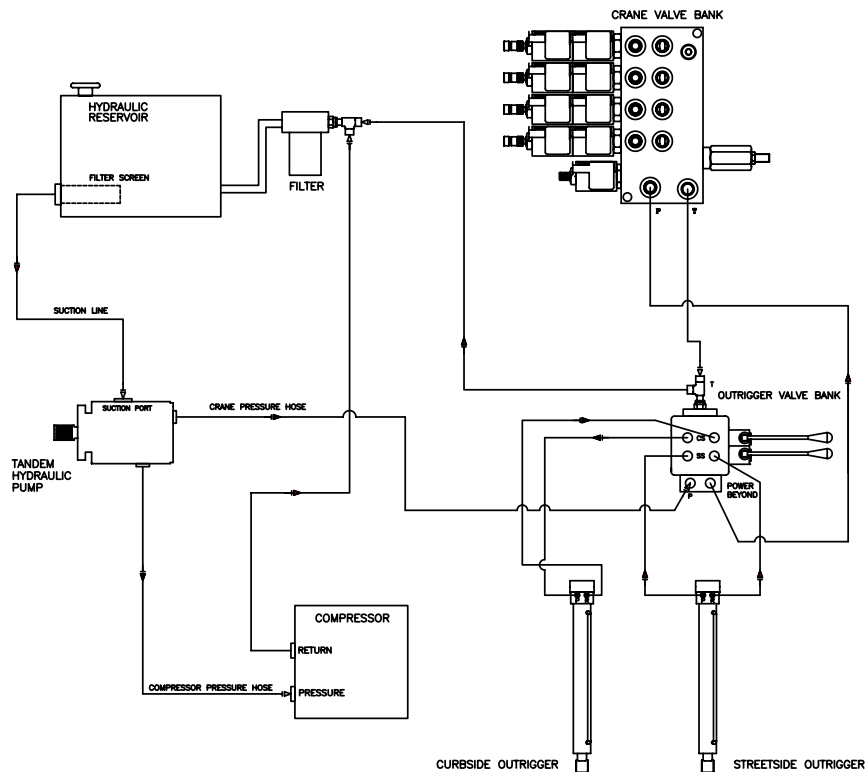
Air System:

Two (2) airlines must be routed to the air tank for proper installation. The main airline is routed from the check valve to the air tank using a 3/4"(200psi) air hose. This is the main delivery line and should be free from all obstructions. A 1/4" line is routed from the air pressure valve to the air tank. This line senses the pressure in the tank and will engage and disengage the compressor automatically.

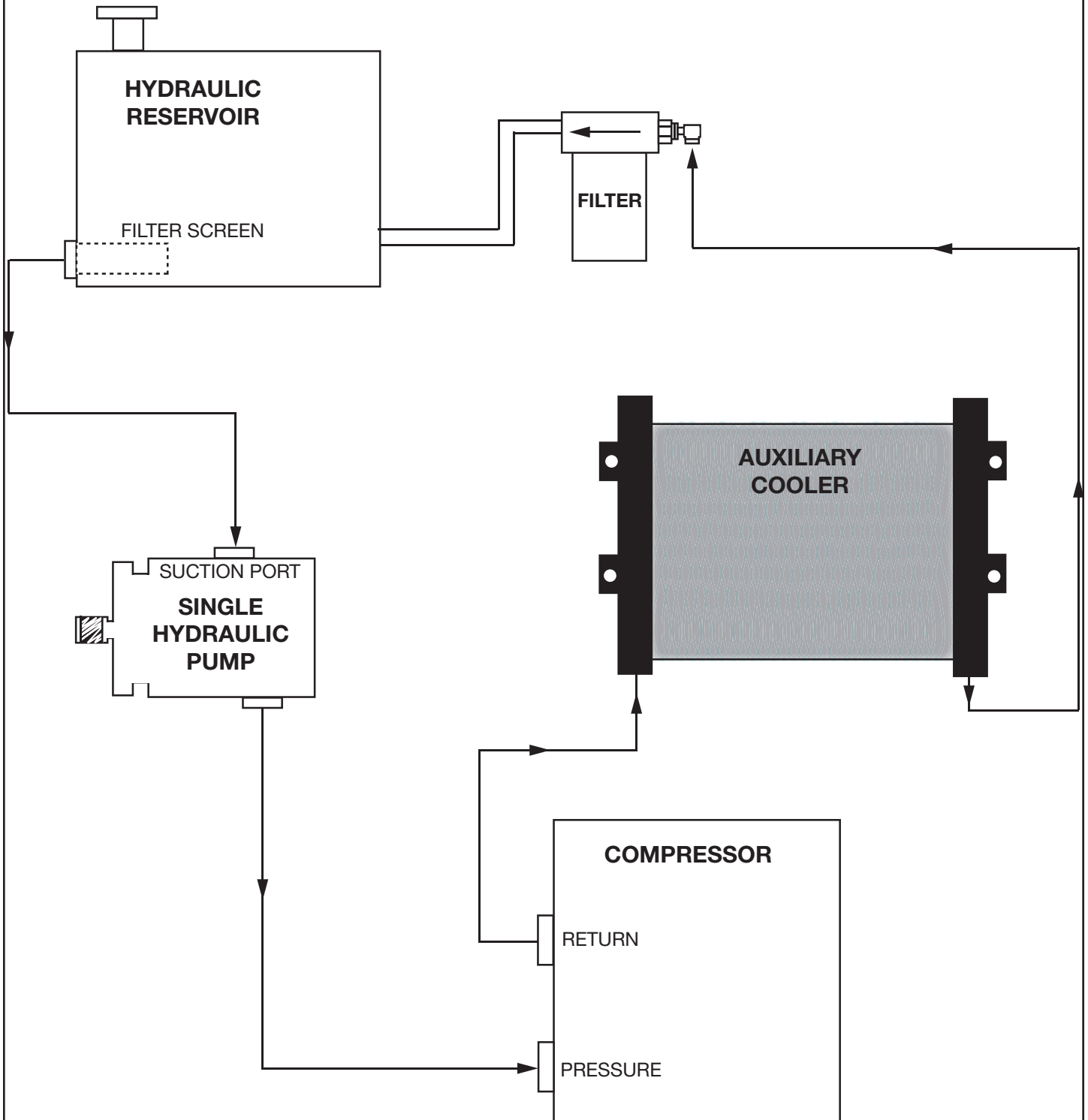
Typical Hydraulic Circuit for Single Stage Pump with Multiple Components



Typical Hydraulic Circuit for Tandem (Two Part) Pump with Multiple Components

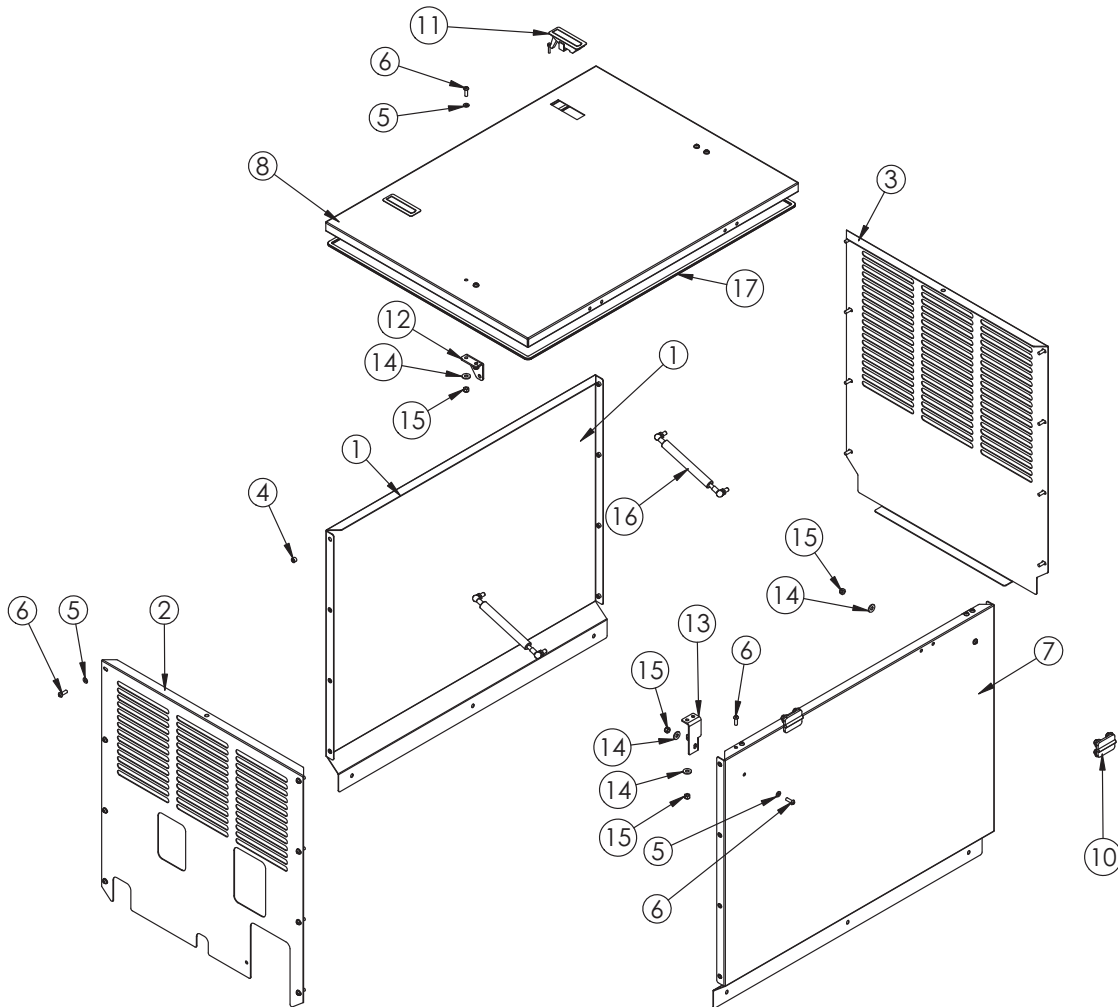


Typical Hydraulic Circuit for Compressor with Auxiliary Cooler



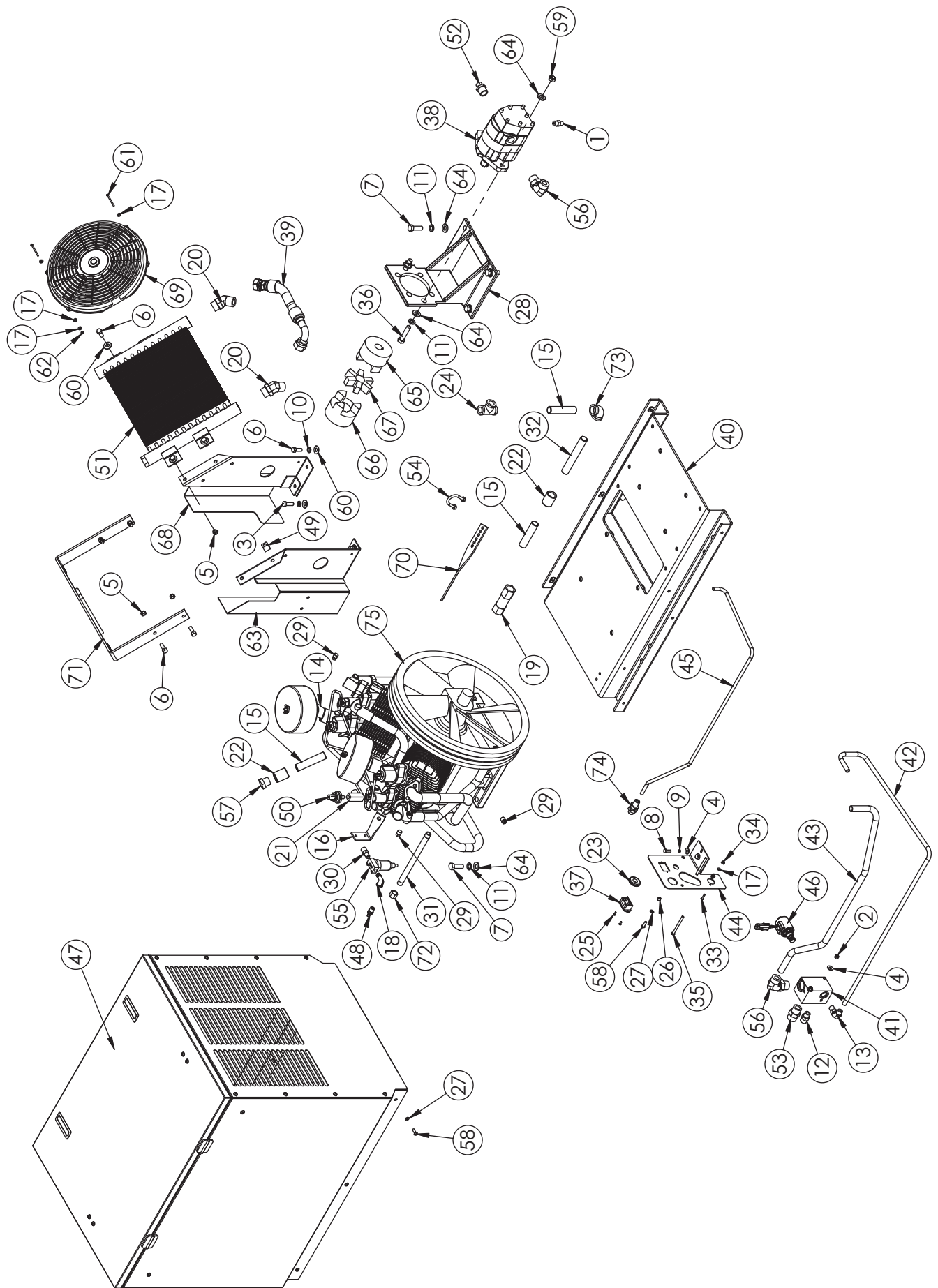
Chapter 6: Assembly Drawings

Shroud Assembly



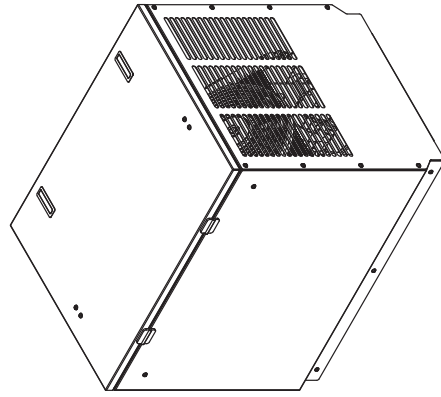
ITEM	PART	DESCRIPTION	QTY.
1	65875	PANEL SIDE SHD66 SHROUD BH PC WHITE	1
2	69517	PANEL FRONT SHD66 SHROUD BULKHEAD PC WHITE	1
3	65877	PANEL REAR SHD66 SHROUD PC WHITE	1
4	19589	NUT SERT 0.25-20X0.38 OD	16
5	19592	WASHER 0.25 FLAT NYLON	22
6	C6021	CAP SCR 0.25-20X0.75 BTNHD SS	26
7	70473	PANEL SIDE RH SHD66 SHROUD BH V3 PC WHITE	1
8	70474	PANEL LID CPRSR SHD66 SHROUD PC WHITE	1
9	70379	HINGE ZINC BLK FLUSH SURFACE MNT DC-50-P8	1
10	70379	HINGE ZINC BLK FLUSH SURFACE MNT DC-50-P8	1
11	69101	LATCH SWING LEVER FLUSH TRIGGER 0.91-1.81	2
12	73654	BRKT LID GASPROP CPRSR SHROUD V2 PC WHITE	2
13	73653	BRKT LOWER GASPROP CPRSR SHROUD V2 PC WHITE	2
14	D0917	WASHER 0.25 FLAT SS	18
15	0333	NUT 0.25-20 HHGR5 NYLOC	18
16	70475	GAS SPRING 7.50-12.00 60# FORCE	2
17	73724	WEATHERSTRIP RIBBED 0.38X0.13X117.00	1

Compressor Assembly Drawing

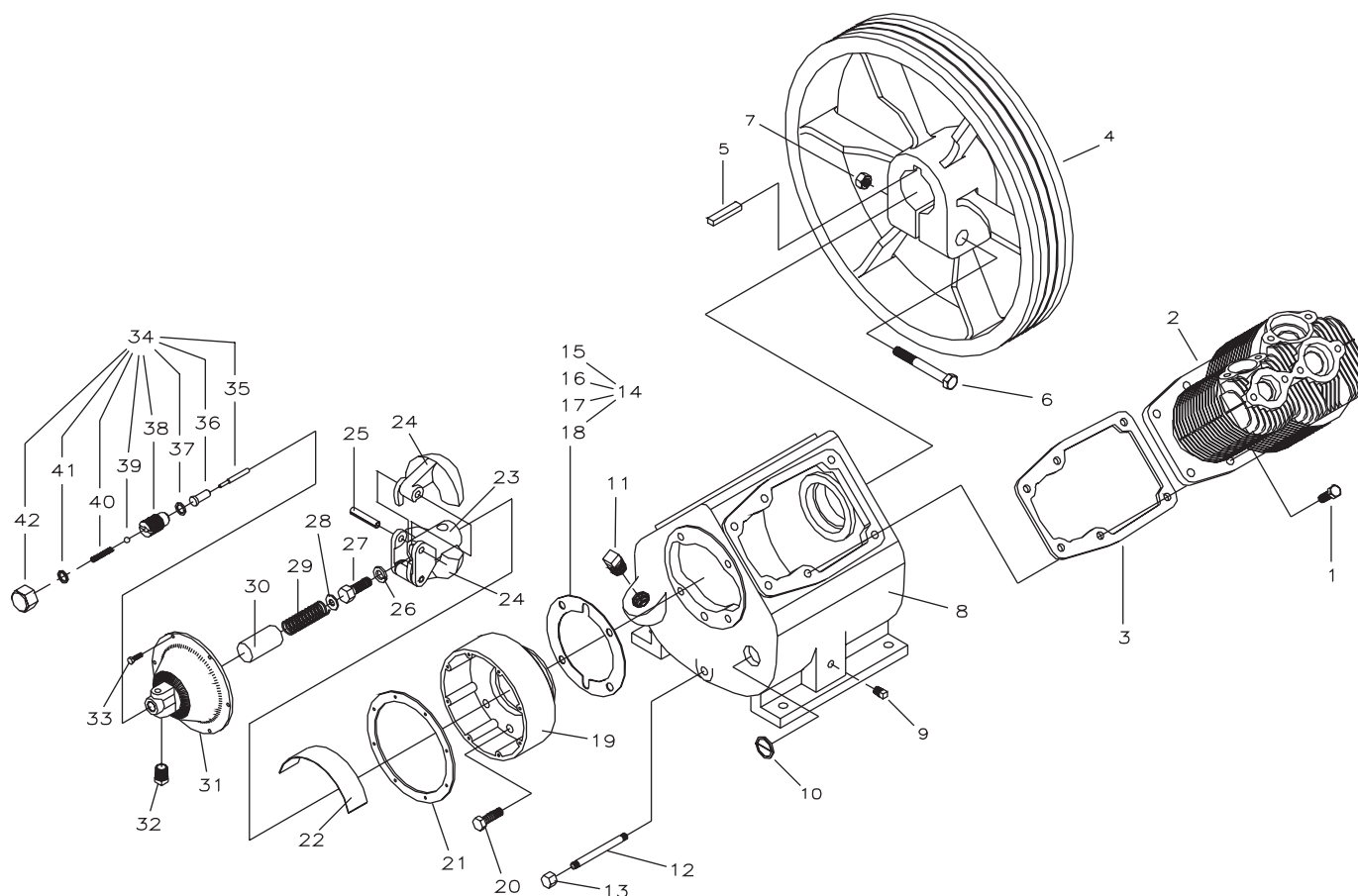


Compressor Assembly Bill

ITEM	PART	DESCRIPTION	QTY.	ITEM	PART	DESCRIPTION	QTY.
1	0279	FIG 6-6 MFS-MORB STRAIGHT	1	40	65873	BASE WILDMT SHD66DD ENCLOSURE BULKHD	1
2	0333	NUT 0.25-20 HHGR5 NYLOC	2	41	69513	MANIFOLD CPRSR SHD66 BULKHEAD	1
3	0335	CAP SCR 0.38-1.6X1.25 HHGR5	2	42	69514	TUBE ASM 0.50 PRESSURE SHD66 BULKHEAD YZ	1
4	0340	WASHER 0.25 USS FLAT ZINC	4	43	69515	TUBE ASM 0.75 RETURN SHD66 BULKHEAD YZ	1
5	0347	NUT 0.38-16 HH NYLOC	8	44	69516	BRKT BULKHEAD MOUNT SHD66	1
6	0351	CAP SCR 0.38-1.6X1.00 HHGR5	10	45	69643	TUBE ASM 0.38 DRAIN SHD66 BULKHEAD YZ	1
7	0359	CAP SCR 0.50-1.3X1.50 HHGR5	8	46	70144	VALVE SOLND W/ RELIEF 12V SVRV10-26B-0-N-12DW	1
8	0479	CAP SCR 0.25-20X0.75 HHGR5	2	47	70385	SHROUD ASM SHD66 BULKHEAD V3	1
9	0521	WASHER 0.25 LOCK	2	48	71406	FTG HOSE 4-4 PL-MP STRAIGHT BRASS	1
10	0523	WASHER 0.38 LOCK	4	49	C0081	CLAMP 0.50 BLK VINYL	1
11	0525	WASHER 0.50 LOCK	10	50	C0864	SWITCH PRES HOBBS	1
12	1554	FIG 8-8 MFS-MORB STRAIGHT	1	51	C1129	COOLER OIL 24 GPM MAX FLOW	1
13	1556	FIG 8-8 MFS-MAORB 90	1	52	C1180	FTG ADAPT 8-12 F5OLO-S	1
14	3854	FIG ST L 45 DEG 44-205	1	53	C2142	FTG 12-12 MFS-MORB STRAIGHT	1
15	4581	NIPPLE 0.75X4.00 BRASS	3	54	C4941	CLAMP MUFFLER 1 1/8	1
16	4703	BRKT UNLOADER VALVE MNT SHD66DD	1	55	C5662	FILTER METAL BOWL 0.25	1
17	5290	WASHER #8 SAE FLAT ZINC	8	56	C5968	FTG 12-12 MFS-MAORB 90	2
18	5418	ST EL 0.25 90 DEG BRASS 44-161	1	57	C6015	FTG 0.75 PLUG 12-P5ON	1
19	5480	VALVE CHECK 0.75 STANDARD	1	58	C6021	CAP SCR 0.25-20X0.75 BTNHD SS	7
20	7351	FIG ST TH ELBOW 45 DEG 12V5OLO	2	59	C6106	NUT 0.50-13 HHGR5 NYLOC	2
21	8277	FIG ST L 0.25 MNPT/0.125 FNPT SPL	1	60	C6353	WASHER 0.38 FLAT GR8	8
22	10659	CPLR 0.75 BRASS	2	61	D0075	SCREW #6-32X2.75 RH HD MACHINE	2
23	12813	GROMMET 1.25ODX0.125X0.625ID	1	62	D0076	NUT #6-32 HH NYLOC	2
24	16711	FIG 0.75-JEE BRASS 80101-12	1	63	D0786	BRKT WILDMT COOLER MINT LH SHD66DD	1
25	18611	SCREW #6-32X0.38 HH MACH SELF TAP	2	64	D0790	WASHER 0.50 FLAT GR8	12
26	19589	NUT SERT 0.25-20X0.38 OD	1	65	D0791	COUPG 1/4 KW L1 50-0.75	1
27	19592	WASHER 0.25 FLAT NYLON	7	66	D0792	COUPG 3/8 KW L1 50-1.75	1
28	19645	BRKT MOTOR MOUNT 19645 POWDERCOAT	1	67	D0793	COUPG SPIDER L1 50-U BLUE URETHANE	1
29	20326	PLUG 0.25 NPT SQ HD BRASS	4	68	D0824	BRKT WILDMT COOLER MINT RH SHD66DD	1
30	20330	FIG 0.38-0.25 FF HEX NIPPLE	1	69	D0840	FAN 12.00 PUSH 12 VOLT SPL 301003	1
31	20459	NIPPLE 0.38X8.00 BRASS	1	70	D0847	BRKT 11.00 TWIST 45 DEG SHD66DD	1
32	20884	FIG 12-12X6.00 MP-MP NIPPLE STRAIGHT BRASS	1	71	D0856	BRKT LIFT SHD66DD	1
33	22183	SCREW #8-32X0.75 BTNHD SS	2	72	D1254	CAP 0.38 PIPE HEX 5406-CAP-6	1
34	22186	NUT #8-32 HH NYLOC SS	2	73	D1266	FIG 12-12 FP-FP 90 BRASS	1
35	24304	CAP SCR 0.25-20X3.00 BTNHD SS	2	74	D1299	FIG BULKHEAD 6WLO-WLNL-S	1
36	26025	CAP SCR 0.50-1.3X2.25 HHGR5	2	75	D1346	CPRSR CHMP R30DHU SPECIAL	1
37	28855	HOOR METER 12VDC TST 180-1911	1				
38	57195	MOTOR HYD RSB04K-Y4500-A 4.0 CID HOSE 0.75(200PSI)-12FSS SHORT-12FSS 90 SHORT 11.5 OAL	1				
39	65746		1				



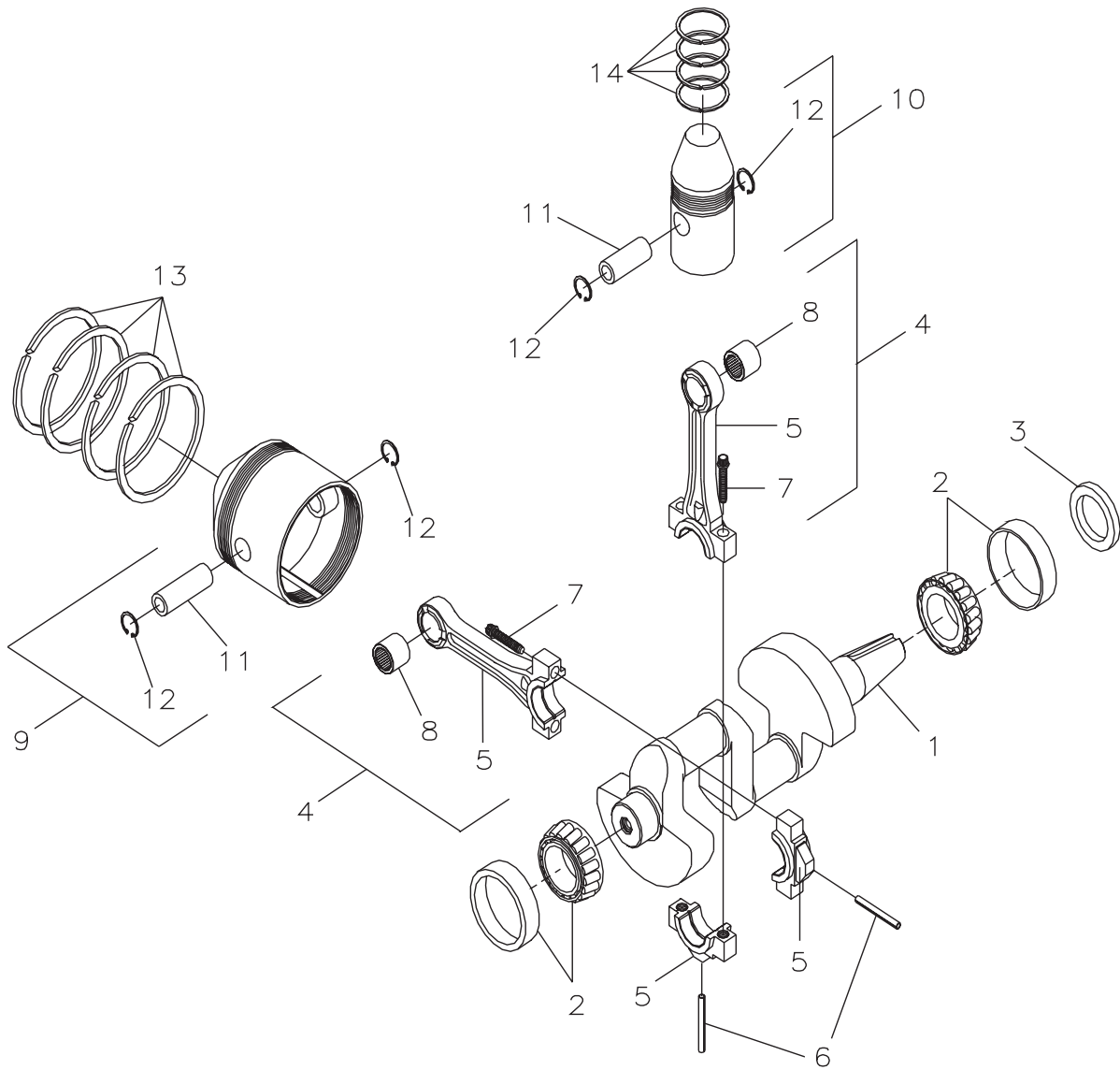
Crankcase, Flywheel, Cylinders, & Centrifugal Unloader



ITEM	PART No.	DESCRIPTION	QTY
01	6074	CAP SCR, HH	12
02	6075	CYLINDER	2
03	6078	GASKET, CYLINDER FLANGE	2
04	D0827	FLYWHEEL	1
05	6079	KEY	1
06	6080	CAP SCR, HH	1
07	6081	NUT, HEX	1
08	6082	CRANKCASE	1
09	6083	PIPE PLUG	1
10	4561	OIL SIGHT GAUGE	1
11	6084	PIPE PLUG (OIL FILL)	1
12	6085	PIPE, OIL DRAIN	1
13	6086	CAP, OIL DRAIN	1
14	6087	GASKET SET, GOVERNOR HOUSING	1
15	6088	GASKET, GOV. HOUSING (.030")	1
16	6089	GASKET, GOV. HOUSING (.005")	1
17	6090	GASKET, GOV. HOUSING (.010")	1
18	6091	GASKET, GOV. HOUSING (.015")	1
19	6092	GOVERNOR HOUSING	1
20	6093	CAP SCR, HH	4
21	6094	GASKET, GOV. HOUSING COVER	1
22	6095	PLATE, GOV. BAFFLE	1

ITEM	PART No.	DESCRIPTION	QTY
23	6096	SPINDLE, GOV. WEIGHT	1
24	6097	GOVERNOR WEIGHT	1
25	6098	PIN, GOVERNOR WEIGHT	2
26	6099	WASHER, SPRING LOCK	1
27	7412	CAP SCR, HH	1
28	7413	WASHER, FLAT	1
29	7414	SPRING, GOV. MAIN	1
30	7415	SLEEVE, SPRING	1
31	7416	COVER, GOV. HOUSING	1
32	7417	MUFFLER ASSY. UNLOADER	1
33	7418	MACH. SCR, HH	8
34	C0896	RELEASE VALVE ASSY. KIT	1
35	7419	PLUNGER, RELEASE VALVE	1
36	7420	SLEEVE, PLUNGER	1
37	7421	GASKET, RELEASE VALVE BODY	1
38	7422	BODY, RELEASE VALVE	1
39	7423	BALL, RELEASE VALVE	1
40	7424	SPRING, RELEASE VALVE	1
41	7425	GASKET, RELEASE VALVE	2
42	7426	CAP, RELEASE VALVE	1
.	7427	COMPLETE PUMP GASKET SET	.
.	.	.	.

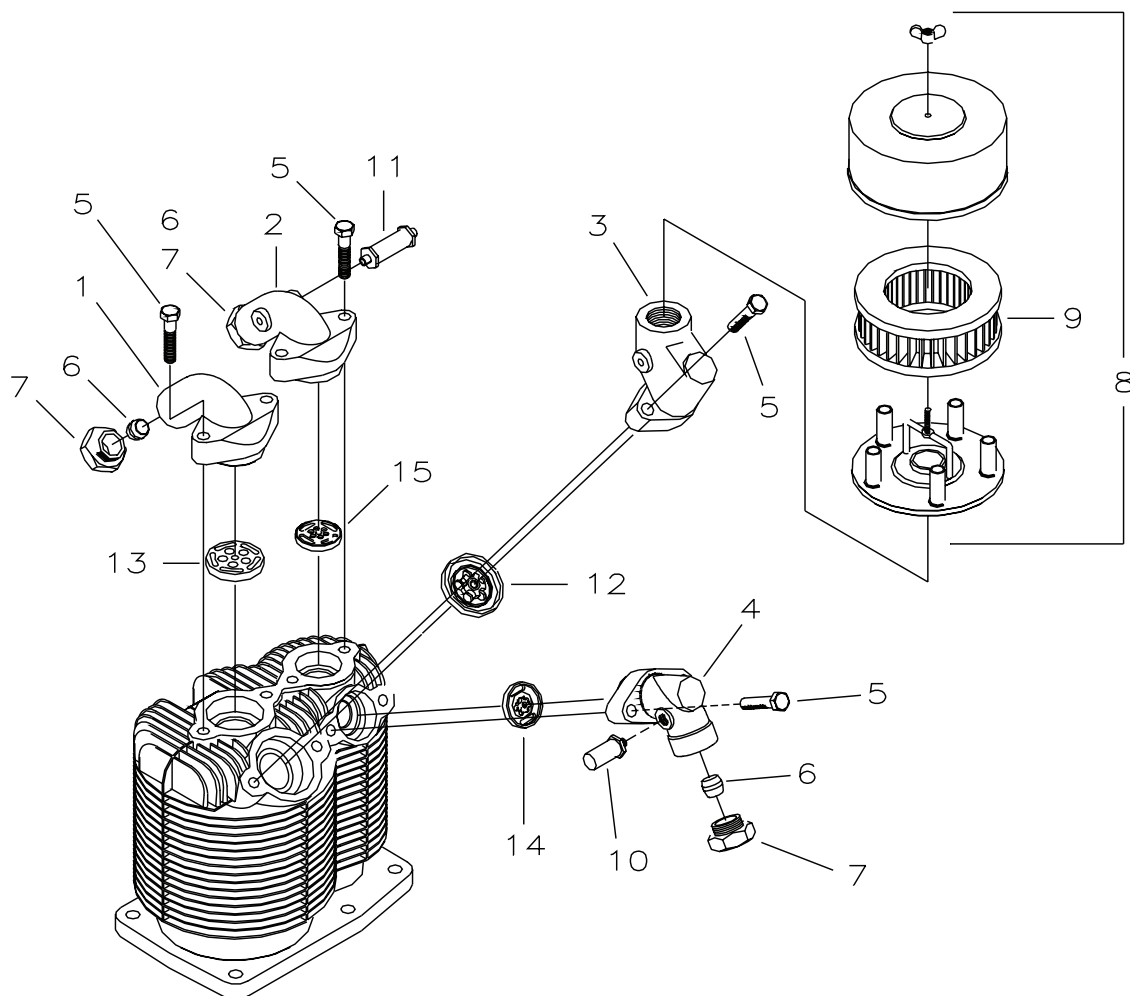
Crankshaft, Rod, & Piston



ITEM	PART No.	DESCRIPTION	QTY
01	7428	CRANKSHAFT	1
02	7429	MAIN BEARING ASSEMBLY	2
03	7430	OIL SEAL	1
04	7431	CONNECTING ROD ASSEMBLY (Items 5,6,7,8)	4
05	C1181	CONNECTING ROD	4
06	7432	OIL DIPPER	4
07	7433	CONNECTING ROD BOLT	8
08	7434	PISTON PIN BEARING	4
09	7435	L.P. PISTON W/PIN	2

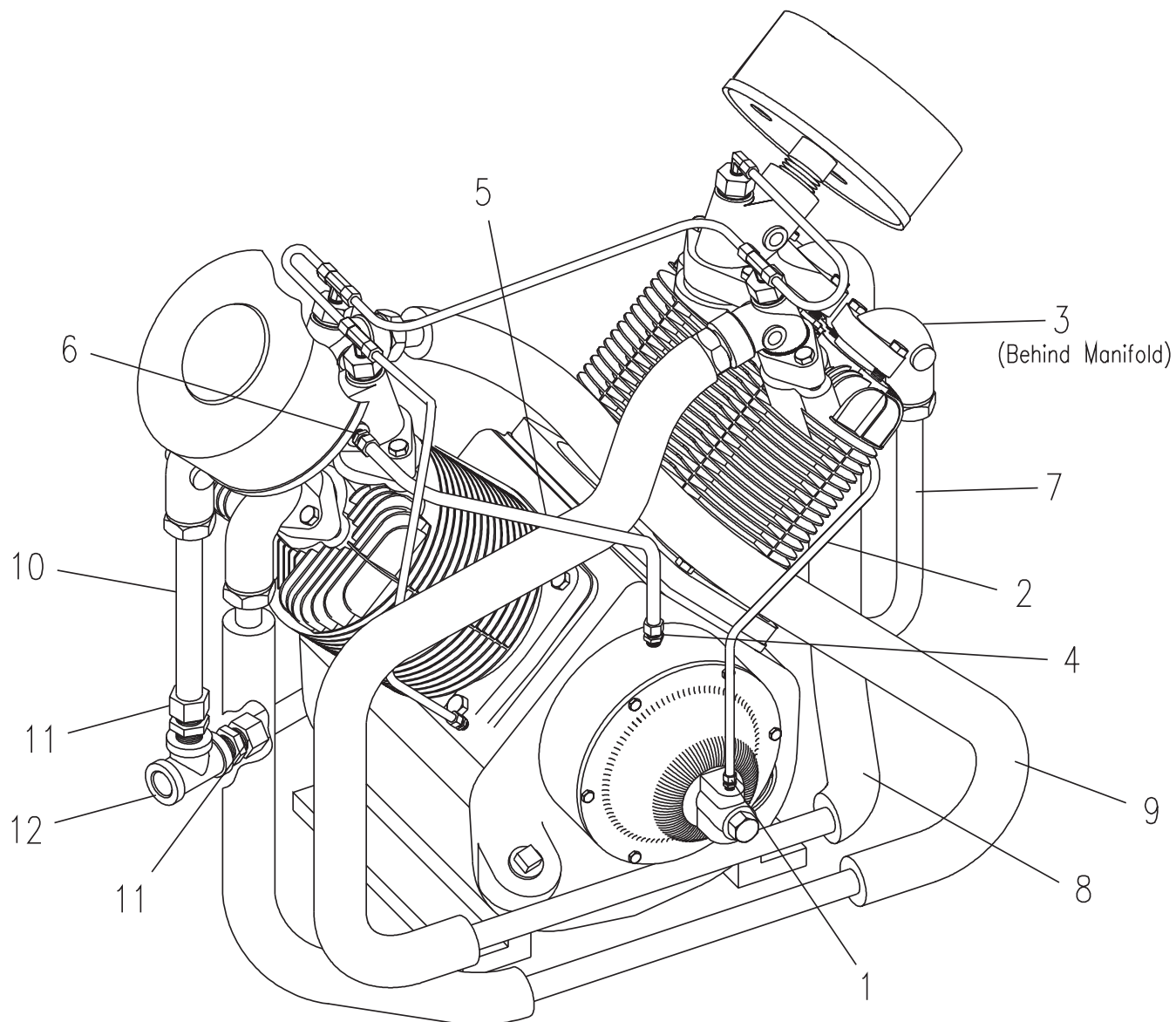
ITEM	PART No.	DESCRIPTION	QTY
10	7436	H.P. PISTON W/PIN	2
11	7437	PISTON PIN	4
12	7438	PISTON PIN RETAINING RING	8
13	7439	L.P. PISTON RING SET	2
14	7440	H.P. PISTON RING SET	2
	7441	H.P. PISTON ASSEMBLY (Items 10,11,12,14)	
	7442	L.P. PISTON ASSEMBLY (Items 9,11,12,13)	
	7443	COMPLETE PUMP RING SET	

Valve, Manifold, & Filter



ITEM	PART No.	DESCRIPTION	QTY
01	7466	MANIFOLD, L.P. EXHAUST	2
02	7467	MANIFOLD, H.P. EXHAUST	2
03	7468	MANIFOLD, L.P. INTAKE	2
04	7469	MANIFOLD, H.P. INTAKE	2
05	7470	CAP SCR, HH (ALL MANIFOLDS)	16
06	C1147	FERRULE	6
07	C0900	NUT, COMPRESSION	6
08	6073	INTAKE FILTER	2
09	4559	FILTER ELEMENT	2
10	C1182	INTERSTAGE PRESSURE RELIEF VALVE	2
11	C1183	PRESSURE RELIEF VALVE	1
12	7471	VALVE ASSEMBLY L.P. INTAKE	2
13	C0891	VALVE ASSEMBLY L.P. EXHAUST	2
14	7472	VALVE ASSEMBLY H.P. INTAKE	2
15	C0894	VALVE ASSEMBLY H.P. EXHAUST	2
	4557	COMPLETE VALVE SET W/GASKETS	
	4558	COMPLETE VALVE GASKET SET	

Tubing Assembly



ITEM	PART No.	DESCRIPTION	qty
1	7473	TUBE FITTING	1
2	7474	RELEASE VALVE TUBE W/FITTINGS (ITEMS 1&3)	1
3	7475	TUBE FITTING	1
4	7476	TUBE FITTING	1
5	7477	BREATHER TUBE W/FITTINGS (ITEMS 4&6)	1
6	7476	TUBE FITTING	1
7	7478	TUBE, DISCHARGE	1
8	D1873	INTERCOOLER TUBE W/FTGS RH	1
9	D1872	INTERCOOLER TUBE W/FTGS LH	1
10	5592	TUBE, DISCHARGE	1
11	5593	TUBE FITTING	2
12	7479	PIPE TEE	1

Chapter 7: Replacement Parts

Hydraulic Replacement Components

Part Number	Description
61792	Hydraulic valve
57195	Hydraulic motor
C1129	Oil cooler
C2029	O-ring #8 face seal
D1244	O-ring #12 face seal
D1247	O-ring #8 SAE port seal
D1249	O-ring #12 SAE port seal
C6226	Hydraulic filter head
C6227	Hydraulic oil filter
16145	Filter gauge

Air End & Assembly Replacement Components

Part Number	Description
D1346	R30 Compressor air pump
7471	Valve assembly (Low pressure intake)
C0891	Valve assembly (Low pressure exhaust)
7472	Valve assembly (High pressure Intake)
C0894	Valve assembly (High pressure exhaust)
4558	Complete valve gasket set
4557	Complete valve set with / Gaskets
32895	Valve assembly kit (Includes both valves 7471 & 7472 only)
7417	Muffler assembly unloader
C0896	Release valve kit assembly
D1873	Intercooler tube w/Fittings (Right hand)
D1872	Intercooler tube w/Fittings (Left hand)
D0786	Cooler Mount Bracket (Left hand)
D0824	Cooler Mount Bracket (Right hand)
D0791	Coupling (Hydraulic motor)
D0792	Coupling (Compressor)
D0793	Lovejoy coupling (Blue urethane)
C0864	Air pressure switch
3853	Pilot valve 145/175 psi
5480	Check valve
D0840	Fan 12 volt
C5662	Metal filter bowl w/Filter

Service Component Replacement Parts

Part Number	Description
4559	Air filter
6073	Intake filter assembly (Housing & filter)
C0087	Synthetic compressor oil (1 quart)
7259	Synthetic compressor oil (Case) 12 quarts
8825	Service kit (Includes air filters, compressor oil, hyd filter & filter bowl)

Chapter 8: Troubleshooting

If symptoms of poor performance develop, the following chart can be used as a guide to investigate and correct the problem. When diagnosing faults in operations of the air compressor, always check that the hydraulic power source is supplying the correct hydraulic flow and pressure that is listed in the compressor specification section of this manual.

Problem	Possible Cause	Solution
Compressor will not start:	PTO not engaged.	Engage PTO.
	Emergency brake off.	Fully engage parking brake.
	Blown fuse.	Replace fuse.
	Loose or broken power/ground wire.	Repair connection.
	Compressor manifold solenoid will not engage.	Repair wiring to coil. Replace valve.
Compressor runs slow or slows down during operation:	Loose air lines or hoses.	Tighten air lines and hose connections.
	Hydraulic flow too low.	Check and reset flow.
	Hydraulic motor worn.	Replace with new motor.
	Hydraulic relief set too low.	Readjust relief valve.
	Faulty compressor valves.	Clean or replace.
	Pilot valve leaking air.	Replace pilot valve.
	Centrifugal unloader valve leaking.	Remove the governor release valve cap, giving access to the unloader pressure release valve spring and ball - Clean thoroughly and reassembly.
	Hydraulic oil temp high.	Hydraulic fluid low. Hydraulic reservoir size incorrect.
Compressor will lock up after operating for a short period:	Hydraulic motor drive coupler loose.	Reposition and tighten coupler.
	Faulty hydraulic relief valve.	Remove relief valve, inspect o-rings and backup seals or replace relief valve.
	Faulty check valve.	Clean or replace check valve.
Compressor runs hot:	Dirty after cooler or intercooler tubing.	Remove and clean.
	Faulty compressor valves.	Clean or replace valves.
	Dirty intake muffler.	Clean or replace.
	Low crankcase oil level.	Add compressor oil as needed.

Problem	Possible Cause	Solution
Compressor will not shut down:	Air line or air hose leaks.	Tighten air lines or hose connections.
	Misadjustment of pilot valve.	Adjust valve per manual specifications.
	Pilot valve leaking air	Clean or replace pilot valve.
	Centrifugal unloader valve is leaking. Moisture or rust contamination.	See "Compressor runs slowly" section. Remove filter bowl. Fill with WD40 lubricant. Open air tank valve. Run compressor for 10 minutes. Partially close air tank valve and cycle compressor. Repeat as needed.
Compressor continues to build air during idle mode:	Faulty low pressure intake valve.	Clean or replace low pressure intake valves.
	Leaking or misadjustment of the pilot valve.	Tighten or adjust valve per manual specs.
Compressor will not speed up when compressor is activated:	Air reservoir full.	Drain air from reservoir.
	Faulty pressure switch.	Test for 12 volt power on both the "C" and "NC" side of the terminals. If no power on "NC" side of pressure switch, replace switch.
	No 12 volt power to coil solenoid valve located on hydraulic manifold.	Check fuse. Check ground wires. Check chassis emergency brake switch.
Engine RPM will not increase when compressor is activated:	Loose wiring.	Check wiring to : Solenoid valve, pressure switch, ground wiring.
	Faulty pressure switch.	Replace pressure switch.
	Faulty speed control.	Check speed control wiring for loose or broken connections. Check relay (For ECM operated speed settings.)
Compressor cycles or runs often:	Faulty pressure switch.	Replace pressure switch.
	Excessive water in air reservoir.	Drain air reservoir.
	Pip lines leaking air.	Tighten or replace lines.
	Misadjustment of pilot valve.	Adjust valve per manual specifications.
	Air leaking from pilot valve.	Clean, adjust, or replace.
	Check valve leaking.	Clean or replace.
Chassis engine RPM continue to operate at high speed when air receiver reaches maximum capacity:	Faulty pressure switch.	Replace pressure switch.
	Pressure switch wiring.	Wires place on pressure switch incorrectly or loose ground wire.



Limited Warranty Statement

American Eagle warrants products designed and manufactured by Stellar to be free from defects in material and workmanship under proper use and maintenance. Products must be installed and operated in accordance with Stellar's written instructions and capacities. The warranty period shall cover the following:

Compressors:

Twelve (12) month warranty on parts and
Twelve (12) month repair labor

Drawer Sets:

Lifetime warranty on slides and hardware

The warranty period shall begin from the date recorded by American Eagle as the in-service date. This date will be derived from the completed warranty registration card. In the event a warranty registration card is not received by American Eagle, the factory ship date will be used. New compressors will be issued on all returns within 90 days of this factory ship date. After 90 days, American Eagle reserves the right to issue remanufactured compressors. Regardless of in-service date, warranty coverage does not extend beyond twenty-four (24) months from date of manufacture.

American Eagle's obligation under this warranty is limited to, and the sole remedy for any such defect shall be, the repair and/or replacement (at American Eagle's option) of the unaltered part and/or component in question. American Eagle after-sales service personnel must be notified by telephone, fax, or letter of any warranty-applicable damage within fourteen (14) days of its occurrence. If at all possible, American Eagle will ship the replacement part within 24-hours of notification by the most economical, yet expedient, means possible. Expedited freight delivery will be at the expense of the owner.

Warranty claims must be submitted and shall be processed in accordance with American Eagle's established warranty claim procedure. American Eagle after-sales service personnel must be contacted prior to any warranty claim. A return materials authorization (RMA) account number must be issued to the claiming party prior to the return of any warranty parts. Parts returned without prior authorization will not be recognized for warranty consideration. All damaged parts must be returned to American Eagle freight prepaid; freight collect returns will be refused. Freight reimbursement of returned parts will be considered as part of the warranty claim.

Warranty service will be performed by any American Eagle new equipment distributor, or by any American Eagle-recognized service center authorized to service the type of product involved, or by the American Eagle factory in the event of a direct sale. At the time of requesting warranty service, the owner must present evidence of date of delivery of the product. The owner shall be obligated to pay for any overtime labor requested of the servicing company by the owner, any field service call charges, and any towing and/or transportation charges associated with moving the equipment to the designated repair/service provider.

All obligations of American Eagle and its authorized dealers and service providers shall be voided if someone other than an authorized American Eagle dealer provides other than routine maintenance service without prior written approval from American Eagle. In the case repair work is performed on a American Eagle-manufactured product, original American Eagle parts must be used to keep the warranty in force. The warranty may also be voided if the product is modified or altered in any way not approved, in writing, by American Eagle.

The owner/operator is responsible for furnishing proof of the date of original purchase of the American Eagle product in question. Warranty registration is the ultimate responsibility of the owner and may be accomplished by the completion and return of the American Eagle product registration card provided with the product. If the owner is not sure of registration, he is encouraged to contact American Eagle at the address below to confirm registration of the product in question. This warranty covers only defective material and workmanship. It does not cover depreciation or damage caused by normal wear and tear, accident, mishap, untrained operators, or improper or unintended use. The owner has the obligation of performing routine care and maintenance duties as stated in American Eagle's written instructions, recommendations, and specifications. Any damage resulting from owner/operator failure to perform such duties shall void the coverage of this warranty. The owner will pay the cost of labor and supplies associated with routine maintenance.

The only remedies the owner has in connection with the breach or performance of any warranty on the American Eagle product specified are those set above. In no event will American Eagle, the American Eagle distributor/dealer, or any company affiliated with American Eagle be liable for business interruptions, costs of delay, or for any special, indirect, incidental, or consequential costs or damages. Such costs may include, but are not limited to, loss of time, loss of revenue, loss of use, wages, salaries, commissions, lodging, meals, towing, hydraulic fluid, or any other incidental cost.

All products purchased by American Eagle from outside vendors shall be covered by the warranty offered by that respective manufacturer only. American Eagle does not participate in, or obligate itself to, any such warranty.

American Eagle reserves the right to make changes in design or improvement upon its products without imposing upon itself the same upon its products theretofore manufactured.

This warranty will apply to all American Eagle Drawer Sets and Compressed Air Systems shipped from American Eagle's factory after July 1, 2005. The warranty is for the use of the original owner only and is not transferable without prior written permission from American Eagle.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ANY OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. REMEDIES UNDER THIS WARRANTY ARE LIMITED TO THE PROVISION OF MATERIAL AND SERVICES, AS SPECIFIED HEREIN. AMERICAN EAGLE INDUSTRIES, INC. IS NOT RESPONSIBLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES.

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